

Last Name	First Name	Abstract Title	Poster #
Andreozzi	Erica	Size-Stable Solid Lipid Nanoparticles loaded with Gd-DOTA for Magnetic Resonance Imaging	111
Awuah	Prince	Platelet Derived Growth Factor Receptor Alpha (PDGFRa): Dispensable or important for liver regeneration?	104
Ballinger	Jared	Microwave Plasma CVD Diamond Employing Interlayers on 440c and 316 Stainless Steel	107
Belley	Matthew	Neutron Dosimetry in a Voxelized Anthropomorphic Phantom Using Monte Carlo Methods	30
Berry-Pusey	Brittany	A semi-automated vascular access system for preclinical models	46
Black	Adam	Multi-Contrast Optical Coherence Tomography for Neuroimaging	23
Boes	Jennifer	Breathing a little easier, or not: tracking and analyzing lung changes with CT & PRM	52
Bombardier	Jeffrey	Formin regulation at the barbed ends of actin filaments	117
Bottenus	Nick	Application of Synthetic Aperture Focusing to Short-Lag Spatial Coherence Imaging	38
Brand	Jonathan	Assessing Margins via Oblique Incidence Diffuse Reflectance Spectroscopy and Confocal Microendoscopy	19
Brossard	Tom	Automated 18F Labeling of Sucrose for Transporter Studies in Plants via PET	32
Brown	Loren	Lef1-mediated up-regulation of Epac1 expression in Chronic Lymphocytic Leukemic Cells	123
Burger	Virginia	Localizing dysplasia for digitally-aided prognosis of Barrett's Esophagus	49
Calhoun	William	Custom multiphoton microscope for long-term imaging of neurons under chronic closed-loop stimulation	17
Carnegie	Daniel	Accurate High-Intensity Focused Ultrasound Ablation in a Porcine Liver Model through Integration of Real-Time Image Guidance, Robotic Navigation, and Elastographic Monitoring	48
Casas	Maria Elena	Elucidating genes and pathways in lipid storage and distribution in C. elegans by novel microfluidic	85
Chancy	Carl	Moire Wavefront Sensor as an Alternative to the Shack-Hartmann for Ophthalmic Applications.	81
Chang	Marisol	ATP-Mg salt and Oxygenated Perfluorocarbon Protects the Intestinal Mucosa during Gut Ischemia	128

Charoen	Kristie	Electrospun Janus Meshes	105
Chen	David	Single Cardiac Cycle Multipoint T1 Mapping with Radial Acquisition	9
Chonde	Daniel	An Image Derived Input Function for Simultaneous Neurological MR/PET Imaging	55
Chowdhury	Shwetadwip	Super-Resolution Structured Illumination Microscopy of Non-Fluorescent, Coherently Scattering Sample	21
Chun	Young Wook	Myofibroblastic response of AVICs on embryonic leaflet stiffness substrates	91
Contijoch	Francisco	Use of Real Time MRI for Measurement of Post-Infarct Cardiac Remodeling via Load-Independent Indices	4
Cooper	Mitchell	Improved T1 Mapping Accuracy by Accounting for the Flip Angle Profile in SSFP Imaging	50
Cunliffe	Alexandra	Lung Texture in Serial Thoracic CT Scans: Assessment of Change Introduced by Image Registration	27
Dagher	Joseph	High resolution, large dynamic range measurement of MR phase maps	2
Dahlberg	Peter	Optogenetics and Sleep	121
D'Amico	Lorenzo	Microfluidic technology for the isolation of pathogenic bacteria in bloodstream infections	86
Davis	Ryan	In Vivo Hyperpolarized Spectroscopy of Hypoxia Inducible Factor-1 Activity in Murine Sarcoma	6
DeCamp	Stephen	Motile Droplets: Active 2D Nematics on a Spherical Surface	124
DeGraffenreid	Anthony	⁷² As labeled radiopharmaceuticals for use as diagnostic imaging and/or therapeutic agents	34
Dempsey	Christopher	Adeno-Associated Virus Nanoparticles as Scaffolds For Gold Nucleation	106
Dibb	Russell	Quantitative susceptibility mapping calculation dependence on contrast agent and field strength	42
DiCamillo	Paul	Bariatric Arterial Embolization with X-ray-visible embolic beads and c-arm cone beam CT for increase	28
Drew	Trafton	Searching in three dimensions: How do radiologists move their eyes when viewing Chest CTs?	57
Eaton	Karen	Engineered macrophages for the application of a healing cardiovascular tissue engineering scaffold	98
Edington	Collin	Tailoring the Trajectory of Cell Rolling with Cytotactic Surfaces	87
Fales	Andrew	Raman Labeled Gold Nanostars as Photodynamic Therapy (PDT) Drug Carriers for Theranostics	109
Fite	Brett	Magnetic Resonance Thermometry at 7T for Real-Time Control of Ultrasound Induced Mild Hyperthermia	10
Gantz	Jay	Targeted Insertion of a Selectable Lineage Tracing Reporter in Human Pluripotent Stem Cells	94

Greenberg	Charles	Threading a Protein Sequence onto its CryoEM Density Map	122
Gunalan	Kabilar	The Hyperdirect Pathway as it Pertains to Side Effects Associated with Deep Brain Stimulation	67
Guo	Liheng	Navigator-Free Self-Gated Cine MR Imaging Using 2D Cartesian Golden Step Phase Encoding	1
Hansel	Marc	More Efficient Generation of Human Induced Pluripotent Stem Cells from Fetal Hepatocytes than Adult Hepatocytes in Feeder-Free Conditions	89
Heckman	Rosalind	The intensity-dependent release of triggered reactions modulates the long-latency stretch reflex	74
Heister	David	Neuronal oscillatory correlates associated with working memory performance	71
Hersey	Joseph	Ultraviolet light stimulated cationic lipid charge reversal for siRNA and DNA delivery	115
Ho	Joshua	Systems analysis of intertissue signaling dynamics in tooth organogenesis	92
Hug	Shaun	Assessing Phenotypic Convergence in Genetically Divergent Subsets of Heat-tolerant Escherichia coli	129
Hunt	Stephen	Evaluation of AVUS treatment effects by DCE-US, DCE-MR, and histopathology.	35
Ikejimba	Lynda	Task-based strategy for optimized contrast enhanced breast imaging in mammography and tomosynthesis	26
Ingram	Patrick	User-friendly Hydrodynamic Single Cell Capture Devices for Cancer Stem Cell Screening	82
Jamiolkowski	Megan	A System for Real Time Visualization of Platelet Deposition onto Opaque Surfaces	79
Janardhanan	Rajesh	Quantifying Myocardial Fibrosis in Hypertensive Left Ventricular Hypertrophy using T1 Mapping	11
Jiji	Ronny	Exercise/rest calf muscle perfusion and perfusion reserve using contrast-enhanced MRI in PAD	15
Johnson	Nessa	Combining Dense Array EEG and Transcranial Magnetic Stimulation to Assess Cortical Reactivity and Co	68
Kang	John	Modeling Stretch-Induced Release of Molecules in the Actin Cytoskeleton	120
Kent	Alyssa	Cluster analysis of Prochlorococcus gene abundance from widely distributed oceanic samples	126
Kim	Paul	Manganese-Enhanced MRI in the Evaluation of Cell-Based Therapy	12
Kim	Kwang	Biomechanical Evaluation of Bioabsorbable Polymer Interference Screws for ACL Reconstruction	76
Knight	Katrina	Impact of Parity on the Mechanical Properties of the Sheep Vagina	75

Kogan	Feliks	Chemical Exchange Saturation Transfer (CEST) Imaging of the Spinal Cord at 7T	7
Konstorum	Anna	A multispecies continuum model of in vitro HGF-induced tumor spheroid growth.	66
Kooser	Ara	Interdisciplinary Approach to Discovering Novel Natural Products from Cave Bacteria Communities	125
Kostecki	Geran	PGC-1 alpha affects action potential conduction and morphology in neonatal rat ventricular myocytes	118
Kut	Carmen	Distinction Between Normal White Matter And Glioma Infiltration By SS-OCT In Human Ex Vivo Tissue	54
Kutten	Kwame	Atlas-Based MR Inhomogeneity Correction	51
Lam	Adrian	Hemodynamic characterization of Aortic Valve Bypass Surgery using CFD models based on MRA and PCMR	61
Lam	Mai	Stem Cell Therapy: Not All Approaches Are Created Equal	96
Larimer	Benjamin	In Vivo Bacteriophage Display Selection for an Improved Breast Cancer Targeting Peptide	41
Lee	Somin	Towards quantification of secreted matrix metalloproteinases during branching morphogenesis	102
Li	Amanda	Computational studies on NapH1, a bacterial vanadium-dependent haloperoxidase	62
Lipman	Samantha	Multi-Modality Rigid and Non-Rigid Prostate Image Registration to Whole- Mount Histology	47
Malyarenko	Dariya	Error Analysis and Correction of ADC Measurements for Gradient Non-Linearity	64
Mananga	Eugene	Myocardial Lesion Detectability in PET Scan	53
Mann	Steve	Quantification of Tc-99m Sestamibi in asymptomatic breast tissue using dedicated breast SPECT-CT	31
Marx	Michael	A Novel Approach for Global Noise Reduction in Resting-State fMRI: APPECOR	8
Mavadia	Jessica	All-Fiber Optic Endoscopic Catheter System for Simultaneous OCT and Fluorescence Imaging	45
McCoin	Jaime	Patterned sensory stimulation reduces urethral spasms and improves bladder voiding after spinal cord	70
Migliori	Benjamin	Direct photoactivation of neurons by laser deposition of thermal energy	22
Miller	Justin	Single-Turnover Stopped-Flow Fluorescence Applied to ClpAP Catalyzed Polypeptide Translocation	119
Mongan	John	Trauma Imaging with Color Contrast for Color CT: In Vivo Use of Complementary Contrast at DECT	25
Myers	Kelly	Imaging Features Associated with Malignant Foci on Breast MRI	58
Novich	Scott	A Sound-to-Touch Sensory Substitution Device for the Severely Hearing Impaired	77

O'Donnell	Charles	Regulatory Network Discovery Using Temporal DNase-seq	100
Olson	Emilia	Towards imaging inflammation with ultrasound based molecular imaging.	37
Ortiz	Ophir	Bone regeneration in a calvarial critical size defect using polymer/mineral composite scaffolds.	88
Pacheco	Patricia	Effects of Fc Density and Microparticle Size on Macrophage and Complement System Activation	127
Peng	Joshua	Characterization and detection of walking-stair transitions in able-bodied ambulation	73
Phipps	Matthew	Delivery of Platelet-Derived Growth Factor from Bone-Mimetic Electrospun Matrices as a Chemotactic F	93
Rebustini	Ivan	A miRNA expression signature associated with Wnt/BMP4 GRN during molar morphogenesis	95
Richner	Thomas	An Optogenetic Micro-Electrocorticography Neural Interface	72
Ritch	Ryan	Phase Aliasing Enhancement to DUET Blind Speech Separation Algorithm	78
Robinson	Erik	Nanodiamond-Gadolinium (ND-Gd) Coupling to Catheter Surfaces for Enhanced Device Visualization	44
Rodgers	Zach	High temporal resolution quantification of global CMRO2 during apneic challenge	16
Rohrman	Brittany	A Paper and Plastic Device for Performing Recombinase-Polymerase Amplification of HIV DNA	84
Rosenfield	Jonathan	Full-Field Transmission Ultrasound Imaging System Employing an Acousto-Optic (AO) Detector	36
Rotz	Matthew	Gd(III)-DNA Gold Nanoconjugates for Cell Tracking During Neural Stem Cell Implantation Therapy	90
Sai	Victor	Molecular Correlates to in vivo Hyperpolarized [1-13C] Dehydroascorbate Reduction	5
Salvaggio	Anthony	Three-dimensional oxygen mapping and characterization of stroke pathophysiology	20
Sanchez	Adrian	Objective Evaluation of CT Image Reconstruction Algorithms	29
Sant	Shilpa	Investigating the role of morphogens in early tooth formation through in vitro 3D gradient system	103
Savol	Andrej	Identifying intermediate states within folding simulations	65
Scholten	Kee	Micro-scale Optofluidic Ring Resonator Sensors for Micro Gas Chromatographs	80
Seidel	Kerstin	Characterization of the incisor stem cell niche using gene co-expression network analysis	101
Seifert	Alan	Feasibility of Quantitative 31P NMR Imaging of Cortical Bone	13

Shiran	Hadas	Aortic Wall Thickness: An Independent Risk Factor for Aortic Dissection?	60
Sim	Deborah	Imaging the Initiation of Inflammation in the Brain with Intravital Two-photon Microscopy	18
Simmons	Rachel	Characterizing Forces Exerted by Mesenchymal Stem Cell Aggregates During Tissue Regeneration	99
Sorace	Anna	Ultrasound Contrast Agents to Enhance Localized Drug Delivery in Cancer	39
Stephan	Matthias	Synapse-directed delivery of immunomodulators using T-cell-conjugated nanoparticles	108
Stittsworth	Shannon	The synthesis of the sigma ligand PD14418 and analogs for biological evaluation	114
Sullivan	Devin	CellOrganizer: Image derived generative modeling	63
Tietjen	Greg	Defining the molecular basis for immune recognition of altered lipid membranes	24
Topper	Melissa	Cathepsin K Radioligands for In Vivo Imaging	40
Torok	Collin	Validation of anti-TEM1 and 5 antibodies for imaging of tumor neovasculature in a GBM mouse model	43
Toy	Randall	Imaging exposes the unique voyage of nanoparticles in tumor microenvironment	113
Vakil	Parmede	Magnetization Spoiling in Radial FLASH Contrast-Enhanced MR Digital Subtraction Angiography	3
Valdes	Gilmer	5FC based gene therapy and its combination with radiation.	112
Wang	Jack	Development of a Physiologically Relevant In Vitro Model of the Blood-Brain Barrier	116
Weber	Jessica	A whole genome assembly of the Black-breasted Hillstar (<i>Oreotrochilus melanogaster</i>)	59
Whitehead	Kathryn	Synergistic Silencing: Combinations of Lipid-like Materials for Improved siRNA Delivery	110
Wong	Stephanie	Analysis of Cellular Rigidity Sensing Using Composite Materials	97
Wu	Grace	Quantitative testing of robust dry reagent storage with filter paper	83
Yatsenko	Dimitri	Effect of global brain state on sensory processing by neurons in primary visual cortex	69
Yotter	Rachel	Spatial heterogeneity of patterns of cortical amyloid deposition in aging and its relationship to me	56
Zaman	Raiyan	Development and Quantification of a Novel Intravascular Catheter-Based Radionuclide Imaging System	33
Zhu	Bo	Advanced MR Molecular Imaging through Contrast Modulation of Contrast Agents	14

